Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	)	
	)	
Amendment of Part 90 of the	)	PR Docket No. 93-144
Commission's Rules to Facilitate	)	RM-8117, RM-8030
Future Development of SMR Systems	)	RM-8029
in the 800 MHz Frequency Band	)	
and		
Implementation of Section 309(j)	)	
of the Communications Act -	)	PP Docket No. 93-253
Competitive Bidding	)	
800 MHz SMR	)	

To: The Commission

COMMENTS OF NEXTEL COMMUNICATIONS, INC.

NEXTEL COMMUNICATIONS, INC.

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SUMMARY

The Omnibus Budget Reconciliation Act of 1993 (the "Budget Act") required the Federal Communications Commission (the "Commission") to eliminate regulatory disparities among providers of competing Commercial Mobile Radio Services ("CMRS"). Congress mandated regulatory symmetry among substitutable CMRS services to enable them to compete on the basis of service characteristics, quality and price, rather than advantages created by regulatory anomalies. Accordingly, in this proceeding, the Commission proposes a new framework for licensing 800 MHz Specialized Mobile Radio ("SMR") systems.

Frequency congestion is a reality for SMR licensees and their customers in the 50 largest markets in the Nation. This fundamental fact, in combination with the Commission's SMR licensing rules, denies SMRs access to the full panoply of technology options available to CMRS competitors and which are necessary to provide customers with advanced mobile communications services. To remedy this, the SMR rules should be revised to grant wide-area SMRs exclusive-use, contiguous channels assigned on a geographic basis like those available to their broadband CMRS cellular and Personal Communications Services ("PCS") competitors. Even the best regulations need updating and reformation after 20 years, particularly in an industry benefitting from whirlwind technological progress.

The Commission recognizes that revising its SMR licensing rules requires considering the "already-existing diversity of SMR services and the competitors providing them." This includes the fact that SMRs are licensed on 530 of the 600 channels previously allocated for Private Land Mobile Radio Services at 800 MHz. A new SMR regulatory structure meeting the Budget Act's mandate requires an across-the-board solution rationalizing licensing throughout these frequencies to assure the public of competitive mobile communications services.

The Commission proposes licensing wide-area SMRs on a Major Trading Area ("MTA") basis on the upper 200 SMR Category channels while designating the lower 80 SMR Category channels for the continued licensing of local SMR systems. The Commission should refine its approach by adopting different transitions for frequency congested metropolitan markets -- where spectrum is at a premium -- and for non-frequency congested areas. Nextel proposes defining frequency congested areas as those generally within 100 miles of the 50 largest metropolitan areas in the Nation.

The Commission should revise its rules to allow wide-area SMRs to obtain a contiguous spectrum block. This would enable SMRs to do as they were intended to do -- to undertake the investments and risks required to introduce the advanced technologies essential to effectively compete with other similar CMRS services and meet the public's demand for improved mobile communications services. The Commission has not previously and must not now permit the existence

of equipment and systems based on 20-year old rules to thwart the introduction of new more efficient technology.

Accordingly, the Commission should license the upper 200 SMR channels on an MTA basis through competitive bidding. It should authorize MTA licensees to establish contiguous spectrum blocks within one year by retuning incumbent SMRs to the lower 80 SMR channels, as well as the 150 General Category channels and the 50 Business channels -- which should become exclusively "new SMR blocks." The Commission should adopt inducements for incumbents to reach voluntary retuning agreements or mutually acceptable operating agreements with MTA licensees in congested areas during an initial six month period; after that incumbents would be required to retune assuming comparable frequencies are available at its existing station locations.

In these competitive and demand-intensive congested areas, the MTA licensee should not be limited in its access to non-MTA block channels (the 80 SMR Category channels and channels in the new SMR blocks). An MTA licensee may need to acquire these channels (or retain those it does not use for retuning) to pursue other spectrally efficient, non-broadband technologies or services.

Although the SMR spectrum is heavily licensed in non-congested areas, few licensees have constructed their systems and are actually offering commercial service. Once the new SMR blocks are established, non-urban SMRs would be retuned off the upper 200-channel wide-area block with a six month voluntary period followed by a six month mandatory period as discussed above for congested

area retuning. When retuning is complete, MTA licensees would voluntarily surrender any frequencies they still hold in rural (non-congested) areas on the new SMR blocks to the retunees -- thereby limiting MTA licensees to 280 channels in non-congested areas. Concurrently, the Commission would cancel all outstanding extended implementation for the new SMR block channels. The spectrum recovered by these actions would be *pro rata* granted to SMR retunees. After five years, the exclusion of MTA licensees from the new SMR blocks would expire, permitting the sale of constructed, operational stations to any eligible party in the marketplace.

Nextel supports using simultaneous multiple round bidding to award MTA licenses with appropriate safeguards to thwart speculation. Nextel also comments on interference requirements and other technical rule revisions related to these licensing changes.

This comprehensive SMR licensing framework would provide wide-area SMRs with the regulatory reforms required by the Budget Act necessary to effectively compete with other broadband CMRS providers. At the same time, it would enhance opportunities for rural SMRs and enhance spectrum availability in non-frequency congested areas. Thus, this SMR licensing framework would carry out the objectives of this rule making proceeding and, most importantly, assure the optimal use of SMR spectrum to provide the public with customer-responsive, competitive commercial mobile communications services.

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In the Matter of	)	
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Amendment of Part 90 of the Commission's Rules to Facilitate Future Development of SMR Systems in the 800 MHz Frequency Band	)	PR Docket No. 93-144 RM-8117, RM-8030
and		
Implementation of Section 309(j) of the Communications Act - Competitive Bidding 800 MHz SMR	)	PP Docket No. 93-253

To: The Commission

COMMENTS OF NEXTEL COMMUNICATIONS, INC.

I. INTRODUCTION

Pursuant to Rule 1.415 of the Federal Communications Commission's ("Commission") Rules, Nextel Communications, Inc. ("Nextel") respectfully submits these Comments in response to the Further Notice of Proposed Rule Making ("FNPRM") in the above-captioned proceeding.1/

The FNPRM states that an overriding purpose of this proceeding is to carry out the Congressional mandate to create regulatory symmetry with cellular and PCS providers for existing private licensees being converted to Commercial Mobile Radio Service

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1/ Further Notice of Proposed Rule Making, PR Docket No. 93-144, FCC 94-271, released November 4, 1994 ("FNPRM").

("CMRS") providers by August 10, 1996.2/ The FNPRM is part of the Commission's continuing implementation of the regulatory framework for mobile radio services mandated by Congress in the Budget Act. The Budget Act amended Sections 3(n) and 332(c) of the Communications Act of 1934 (the "Act") by creating a new category of mobile communications, the CMRS. Congress mandated regulatory symmetry among substitutable services to enable CMRS service providers to compete on the basis of service characteristics, quality and price, rather than advantages created by regulatory anomalies.

Thus, the Budget Act requires that the Commission affirmatively enable Specialized Mobile Radio ("SMR") providers to achieve licensing and spectrum access parity with other broadband CMRS providers. Wide-area SMRs must have access to exclusive-use, contiguous channels assigned on a geographic basis like those available to every other broadband CMRS competitor. The Commission should create rules that provide the minimal regulatory framework

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2/ Section 6002(d)(3) of the Omnibus Budget Reconciliation Act of 1993, Pub. L. No. 103-66, Title VI Section 6002(b), 107 Stat. 312, 392 (1993) (the "Budget Act."). The Commission has failed to meet the August 10, 1994 statutory deadline for regulatory parity in the licensing of reclassified private carrier services, yet has moved expeditiously to create regulatory symmetry for other CMRS common carriers. For example, the Commission recently completed a comprehensive rewrite of its rules for the common carrier mobile services to eliminate burdensome requirements and streamline licensing. See Report and Order, CC Docket No. 92-115, 9 FCC Rcd 6513 (1994). It has proposed eliminating the common carrier dispatch prohibition, which would for the first time open fleet dispatch to the well-capitalized, spectrum-rich cellular industry. It has also proposed eliminating the wireline SMR entry prohibition, which would permit telephone company entry into the SMR industry. See Notice of Proposed Rule Making, GN Docket No. 94-90, 9 FCC Rcd 4405 (1994).

necessary to assure the optimal use of scarce SMR spectrum, particularly in frequency congested areas, to provide customer-responsive, competitive mobile communications services.

II. BACKGROUND

The Commission states that its goal in this proceeding is to establish a flexible regulatory scheme for the 800 MHz SMR service that will achieve more efficient licensing, eliminate unnecessary regulatory burdens and enhance the competitive potential of SMR services in the mobile services marketplace.3/ At the same time, the Commission desires to ensure that licenses are granted to those who value the spectrum most highly and will maximize its use.

To accomplish these goals, the Commission proposes a new framework for licensing 800 MHz SMR systems. It would include new rules for assigning blocks of SMR spectrum in defined market-based service areas (Major Trading Areas ("MTA")) to facilitate the development of wide-area SMR systems "that are comparable to and compete with cellular and broadband Personal Communications Services (PCS) systems."4/ It would also include designating

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3/ As the Commission has stated,

> "Our overriding goal in the [Commercial Mobile Radio Service] CMRS proceeding has been to achieve regulations that maximize competition among CMRS providers and eliminate regulatory distortions in the mobile services market." See FNPRM at para. 2.

4/ Id. at para. 1.

part of the 800 MHz SMR spectrum for the continued licensing of SMR systems that primarily provide local service.5/

Specifically, the FNPRM proposes that the top 200 channels in the 800 MHz SMR spectrum be licensed for use in wide-area SMR systems and auctioned to wide-area SMR licensees in blocks of 50 contiguous channels.6/ Incumbent providers in these 50-channel blocks who are not awarded the MTA license would be protected; *i.e.*, the MTA licensee would be required to provide co-channel interference protection for non-affiliated incumbents unless it negotiates a voluntary relocation, frequency swap, purchase or other accommodation of the incumbent's system. The lower 80 800 MHz SMR channels would likewise be auctioned -- although not on a wide-area basis when there are mutually exclusive applications for

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5/ The FNPRM does not define specifically the terms "wide-area SMR" and "local SMR." Nextel submits that wide-area SMRs are those that use a digital transmission technology in a low-power, multiple base station configuration incorporating frequency reuse and call hand-off and that are capable of providing high-capacity, two-way cellular-like mobile telephone, fleet dispatch and customized dispatch service over large geographic areas. Wide-area SMR base stations in urban areas typically operate at less than 100 watts ERP and at less than 200 foot antenna heights.

Local SMRs are those that serve more limited geographic areas using analog FM transmission technology with a single, high power base station operating at up to 1,000 watts ERP at 1,000 feet. These systems are designed primarily for fleet dispatch communications and provide limited two-way interconnected voice capacity. Although some local SMRs use a series of high power base stations to provide wider-area or regional coverage, they do not employ spectrum efficient technologies with a frequency reuse architecture or call hand-off capability.

6/ FNPRM at para. 22. The top 200 channels are a contiguous block of SMR channels which were licensed by the Commission on a site-specific basis in non-contiguous five, 10, 15 or 20-channel blocks. See 47 C.F.R. Section 90.617(d).

these channels. The FNPRM also seeks comment on revised licensing rules and policies for the other 250 800 MHz channels on which SMRs are licensed.7/

The Commission observes that "the SMR industry presents certain unique issues because of the already-existing diversity of SMR services and the competitors providing them."8/ The Commission's records indicate at least 33,000 SMR licenses exist today with virtually all channels in the major markets either already in use or under construction.9/ Processing the backlog of nearly 40,000 pending applications will increase that number dramatically.10/ SMR systems are intensively licensed not only on the 280 SMR category channels, but on 530 of the 600 channels allocated for Private Land Mobile Radio Services at 800 MHz.11/

7/ Id. at paras. 51-54. This includes the 150 General Category channels, the 50 Industrial/Land Transportation channels and the 50 Business channels. Chart I depicts the service categories of the 600 channels at 800 MHz at issue in this proceeding allocated to the Private Land Mobile Radio Service.

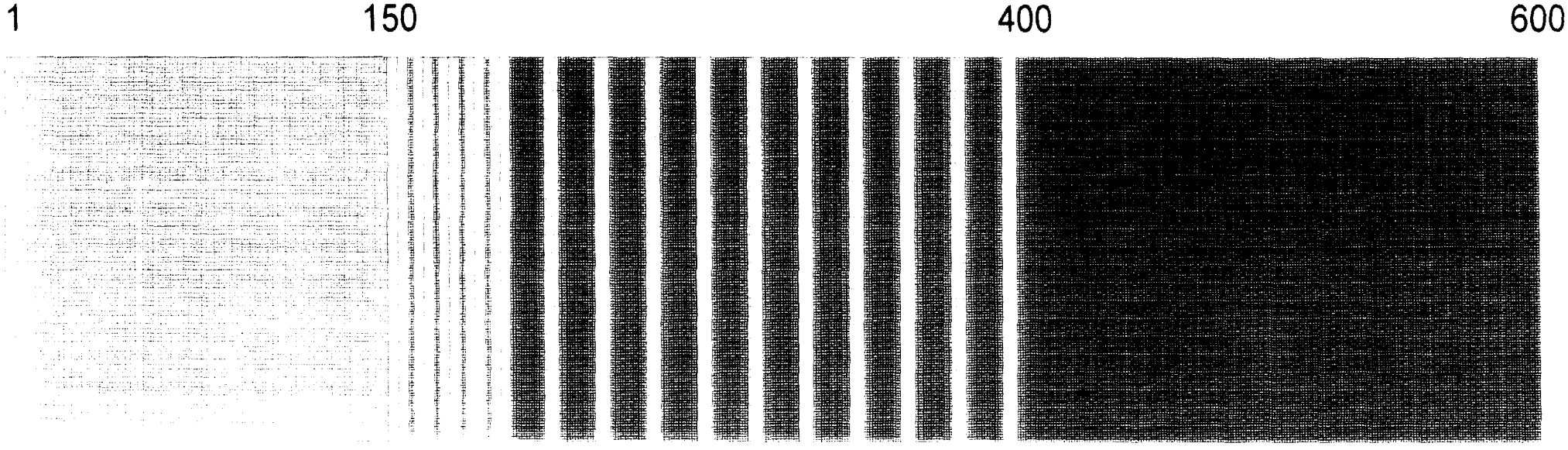
8/ Id. at para. 2.

9/ Id. at para. 4.

10/ On November 22, 1994, the Commission accepted the assistance of the private land mobile industry -- specifically the American Mobile Telecommunications Association ("AMTA"), the Industrial Telecommunications Association ("ITA") and the National Association of Business and Educational Radio ("NABER")-- to process the backlog. Although not all 40,000 applications are for SMR systems, processing the backlog will nevertheless add a significant number of licenses to the already-saturated SMR spectrum.

11/ Seventy channels are allocated and licensed for Public Safety use and are not impacted by the FNPRM or Nextel's proposal.

CURRENT 806-821/851-866 MHz CHANNEL ALLOCATION PLAN



GENERAL CATEGORY

INDUSTRIAL/LAND TRANSPORTATION

BUSINESS

PUBLIC SAFETY

SMRS

25 kHz Channels

CHART I

The Commission must take into account existing licensing on all 530 channels in designing a new SMR regulatory structure.

In its Third Report and Order in GN Docket No. 93-252, the Commission stated that the PCS and cellular rules provide greater flexibility than the SMR rules in that they: (1) authorize use of spectrum over Commission-defined service areas, (2) assign contiguous spectrum blocks to a single licensee on an exclusive basis, (3) use construction and coverage requirements rather than channel loading requirements to ensure efficient use of the spectrum, and (4) afford maximum flexibility to locate, design, construct, and modify facilities within one's licensing area, so long as no interference is caused to other licensees.12/ The Commission concluded that establishing a similarly flexible licensing scheme for 800 MHz SMR on an MTA-basis would enable licensees to compete more effectively with cellular and PCS.13/ This is imperative and must be accomplished expeditiously in this

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12/ Third Report and Order, GN Docket No. 93-252, FCC 94-212, released September 23, 1994, at para. 95 ("Third Report and Order"). Moreover, the existing SMR licensing scheme has had several undesirable consequences. First, it has limited wide-area SMR licensees to 25 kHz channels, thereby restricting their technology options and potentially denying the public advanced competitive services. Second, it has impacted smaller SMRs in non-congested (rural) areas by restricting their operational flexibility and growth potential. Third, it has permitted SMR application mills to flourish enabling unconstructed or minimally constructed "greenmailers" with no intention of operating *bona fide* mobile communications systems to obstruct legitimate 800 MHz service providers. Fourth, site-by-site SMR licensing has severely strained the Commission's licensing resources.

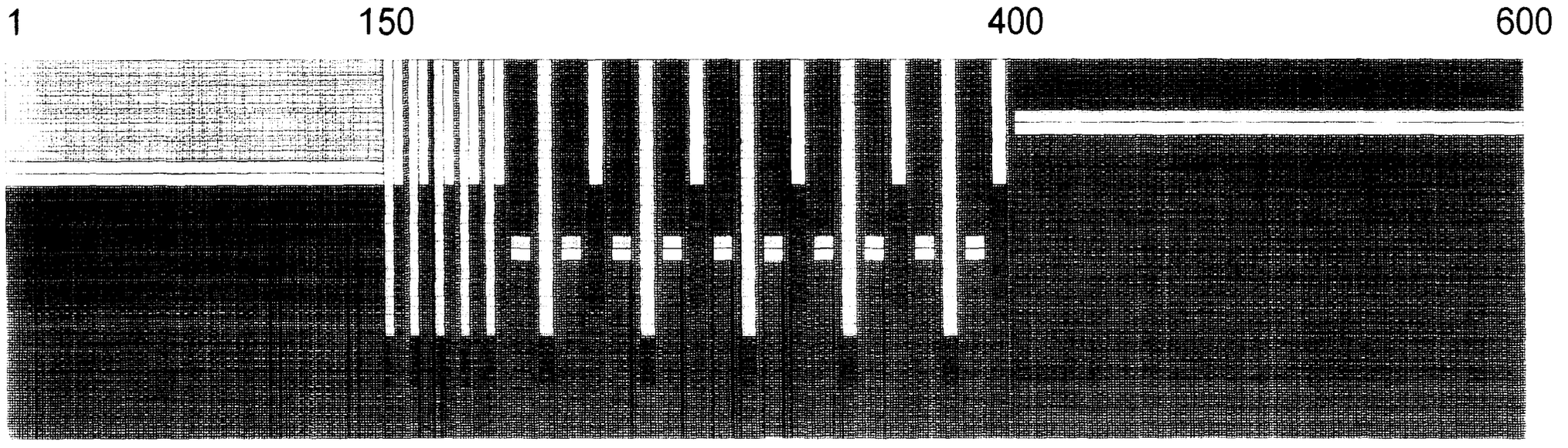
13/ Id.

proceeding. Chart II depicts the current chaotic state of SMR licensing on the 800 MHz band.

Different SMR licensing policies are appropriate in congested metropolitan markets -- where spectrum is at a premium -- as opposed to non-frequency congested areas where few licensees have actually constructed their systems. The driving force behind the creation of wide-area SMRs in the most congested markets is insufficient SMR capacity; *i.e.*, spectrum scarcity. In the large metropolitan areas, SMR systems have been constructed on all available channels and are heavily loaded with customers; *i.e.*, spectrum is being fully utilized, not merely licensed and warehoused. Generally, existing SMRs in these congested markets are experiencing growth constraints due to increased customer demand coupled with the spectrum needs of competing operators.

In the large, frequency congested markets, the *status quo* is not an acceptable choice. Spectrum congestion is forcing SMR operators to either turn away customers, accept them at the cost of increasingly degraded service or invest in more efficient technology. Given the Commission's statutory responsibility to encourage the use of more efficient communications technologies, it must revise its rules to allow wide-area SMR licensees to obtain a contiguous spectrum block. This would enable SMRs to do as they were intended to do -- to undertake the investments and risks required to introduce the advanced technologies essential in congested areas to meet the public's demand for improved mobile communications services.

ACTUAL 806-821/851-866 MHz LICENSING



GENERAL CATEGORY

INDUSTRIAL/LAND TRANSPORTATION

BUSINESS

PUBLIC SAFETY

SMRS

WIDE AREA SMRS

CHART II

25 kHz Channels

Outside of the large metropolitan areas, however, relatively few SMR systems are actually constructed. Application mills and other speculators have licensed nearly all of the channels, but few are actually serving commercial customers. In addition, current SMR licensing policies have allowed wide-area SMRs to license hundreds of channels in these areas and receive five-year extended implementation periods. These developments have precipitated a shortage of channels for operating incumbents to expand the capacity or geographic coverage of their systems. These problems must be addressed.

Given the considerations discussed above, a new SMR licensing framework should differentiate between congested and non-congested areas. In the frequency congested metropolitan areas, *i.e.*, areas within 100 miles of the 50 largest metropolitan areas in the Nation,14/ the Commission should permit an MTA license winner to expeditiously establish a 200-channel contiguous spectrum block on channels 401-600 through retuning incumbent local SMRs. Nextel proposes a six month period for voluntary retuning, with certain

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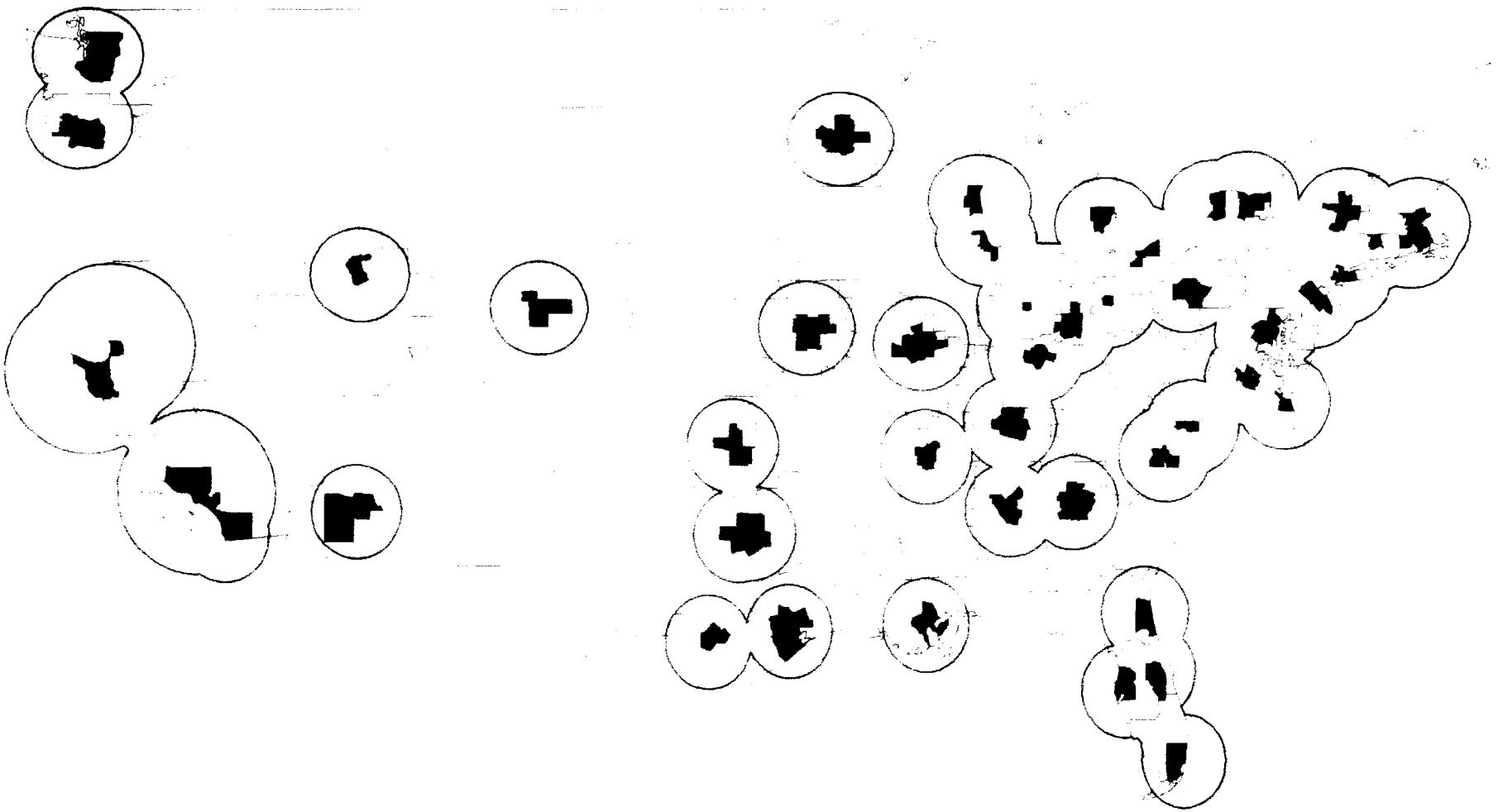
14/ Chart III is a map depicting the frequency congested metropolitan areas and the non-congested areas. Nextel defined each frequency congested metropolitan area by drawing a 100-mile circle from the reference coordinates of each of the primary cities of the top 50 markets as defined in FCC Public Notice "Private Land Mobile Application Procedures For Spectrum In The 896-901 MHz and 935-940 MHz Bands", released November 4, 1986. To account for the high elevation sites in California, which receive extended protection under the Commission's rules, 175 mile circles were drawn from the Los Angeles, San Francisco, and Sacramento reference points. Any area that was totally enclosed by adjacent circles was included in the aggregate defined area. Partially enclosed areas along the California coast, Florida coast and Indiana-Michigan border were also included in the adjacent aggregate defined area.

FREQUENCY CONGESTED METROPOLITAN AREAS



MTA BASE MAP

CHART III

inducements,15/ and six months for mandatory retuning. The MTA licensee would be responsible for the incumbent's reasonable out-of-pocket expenses incurred in retuning.

The Commission's statutory mandate to promote the use of more efficient wireless technologies, and to create regulatory symmetry among competing CMRS services, requires that wide-area licensees have recourse to mandatory retuning where needed to obtain the exclusive-use, contiguous spectrum necessary to compete in the dynamic mobile communications marketplace. This would be consistent with the Commission decision to award PCS licensees contiguous spectrum through mandatory relocation of incumbent microwave licensees. Existing operators using 20-year old, inefficient technology have not in the past and should not now be accorded the right to thwart the introduction of more efficient technology and new improved services.

Nextel also proposes that the Commission establish new SMR blocks on the 150 contiguous General Category channels and 50 Business Category channels.16/ The relative demand for SMR services warrants making the General Category channels exclusive SMR channels. Similarly, the 50 Business channels are primarily used for SMRs and should be so designated as part of the new SMR blocks.

15/ These proposed inducements are discussed on page 33, infra.

16/ Hereinafter, these channels are referred to as "new SMR blocks."

In non-congested areas; *i.e.*, areas outside 100 miles of the 50 largest metropolitan areas, more spectrum is actually available for both wide-area and local SMR systems. Therefore, once the new SMR blocks are established, the MTA licensee could initiate retuning of local SMRs in non-congested areas with a six month voluntary period and six months mandatory period, as discussed above. When the retuning of local SMRs from the MTA block is completed, the MTA licensee would voluntarily surrender any new SMR block frequencies it still holds in non-congested areas -- effectively limiting MTA licensees to 280 channels in non-congested areas.17/ At the same time, the Commission would cancel all outstanding extended implementation periods for remaining licensees in the new SMR blocks. All new SMR block spectrum outside of the 280 existing SMR channels recovered from the MTA licensees would then be provided directly to retuned SMRs on a *pro-rata* basis.18/

Despite the recent "gold rush" of SMR licensing, there are real differences in SMR spectrum use in congested areas and non-congested areas. In the competitive and demand-intensive major markets, the MTA licensee should not be limited in its access to

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17/ In other words, the Commission would authorize MTA licensees to retune local SMRs off the 200-channel MTA block throughout each MTA. In non-congested areas, however, retuning would not commence until the Commission creates the proposed new SMR blocks.

18/ The exclusion of wide-area MTA licensees from the new SMR blocks would expire after five years. At that time, all SMR licensees would be free to sell constructed, operational stations to any eligible party in response to marketplace forces.

non-MTA broadband block channels (the 80 SMR Category channels and channels in the new SMR blocks). An MTA licensee may need to acquire these channels (or retain those it does not use for retuning) to pursue other spectrally efficient, non-broadband technologies or services. On the other hand, in non-congested markets with lower customer demand, and therefore less intensive spectrum utilization, limiting MTA licensees to the 280 SMR Category channels provides them with sufficient spectrum while preserving opportunities for smaller SMRs on the new SMR blocks. This will allow the marketplace in non-congested areas to develop in response to evolving customer requirements, rather than regulatory predetermination.

III. CHRONOLOGY

A. HISTORY OF THE SMR LICENSING PROCESS

This FNPRM continues a process which began in 1974 with the creation of the SMR industry. The SMR service has its origins in the Commission's decision, in Docket 18262, to reallocate 30 MHz of spectrum in the 806-821 MHz and 851-866 MHz bands from television broadcasters and the federal government to private land mobile use.19/ The Commission designated 200 channels for trunked systems in which two or more channels are linked with a computer

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19/ See First Report and Order and Second Notice of Inquiry, 35 FR 8644 (June 4, 1970); Second Report and Order, 46 FCC 2d 752 (1974) ("Second R&O"); Memorandum Opinion and Order, 51 FCC 2d 945 (1975) ("Docket 18262 MO&O"); aff'd National Association of Regulatory Utility Commissioners v. FCC, 525 F. 2d 630 (D.C. Cir. 1975), cert. denied, 425 U.S. 992 (1976). The Commission also made its original allocations for the Domestic Public Cellular Mobile Radio Telecommunications Service in this proceeding.

which automatically assigns the first available channel to a user.20/ The Commission concluded that trunking could be developed and implemented most expeditiously in a competitive marketplace.21/ Accordingly, it created the SMR licensee as a commercial entity authorized to provide service to private land mobile eligibles on a for-profit basis. By allowing these entities to make a profit, the Commission provided them the incentive to assume the financial risks and obligations of building 800 MHz trunked systems including developing new systems designs, technologies and marketing techniques to maximize the efficient use of this spectrum.22/

The Commission's decision in the Fleet Call Waiver Order enabled qualifying SMRs to develop more efficient wide-area systems using advanced digital technologies and state-of-the-art frequency reuse configurations.23/ Nextel (then Fleet Call, Inc.)

20/ Trunking is more efficient than conventional single frequency systems because it allows a greater number of mobiles to be accommodated on a given number of channels.

21/ See Second R&O at 763-765; see also Docket 18262 MO&O at 956-957.

22/ See Second Report and Order, PR Docket No. 79-191, 90 FCC 2d 1281, 1283 (1982). SMRs have delivered many of the public interest benefits contemplated by the Commission in authorizing entrepreneurial, for-profit SMR systems on a competitive basis. These include: the development of trunked 800 MHz systems; improved communications quality and lower cost service; systems responsive to user needs; and the introduction of new mobile communications services and techniques. See Docket 18262 MO&O at 968-970.

23/ On February 13, 1991, the Commission authorized Nextel (then Fleet Call, Inc.) to construct and operate 800 MHz wide-area SMR systems in Chicago, Dallas, Houston, Los Angeles, New York and San Francisco. See In Re Request of Fleet Call, Inc. for Waiver

(continued...)

originally sought relief in 1990 to construct and operate wide-area SMR systems in six of the most frequency congested land mobile communications markets in the country.24/ The explosive growth in demand for SMR services had virtually exhausted the capacity of existing analog trunked SMR systems such that there were virtually no 800 MHz SMR channels in these markets that were not substantially loaded.25/ The extent of the then-current demand for additional SMR capacity in these and other major metropolitan markets was evidenced by extensive waiting lists for additional 800 MHz spectrum.26/

Given these constraints, and the limitations of existing SMR technology, Nextel looked for innovative ways to more efficiently

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23/(...continued)
and Other Relief to Permit Creation of Enhanced Specialized Mobile Radio Systems in Six Markets, 6 FCC Rcd 1533 (1991) (the "Fleet Call Waiver Order"), recon. den. 6 FCC Rcd 6989 (1991).

24/ See In the Matter of Fleet Call, Inc. for Authority to Assign SMR Licenses and Waiver of Certain Private Radio Service Rules, File No. LMK-90036, filed April 5, 1990, at pp. 5-6.

25/ Even as early as 1988, the Commission recognized the enormous demand for these services in urban areas: "The SMR service has emerged over the past decade to become the preeminent provider of private land mobile communications service, particularly in the nation's largest metropolitan areas." See Amendment of Part 90, Subparts M and S of the Commission's Rules, Report and Order, 3 FCC Rcd 1838 (1988). The Commission stated that each time it has allocated new spectrum to the SMR services, "the amount allocated has not been enough to meet the demand for SMR facilities, particularly in large urban markets." Id. at 1839.

26/ Under the Commission's first-come, first-served SMR licensing rules, applications for additional channels, or for new systems that could not be met, were placed on waiting lists to establish priority for any future channel recoveries. For example, in 1990, there were 111 applications on the Los Angeles SMR waiting list and 93 applications on the New York waiting list. Some of these applications were at that time already nine years old.

use the 800 MHz SMR spectrum to increase capacity and provide the full scope of mobile radio communications desired by users in the 1990s.27/ In reliance upon, and in full compliance with the Commission's rules and policies, Nextel alone has already invested nearly half a billion dollars to develop, construct and operate a nationwide wide-area SMR system. Nextel's unique service offers mobile workforce customers a combination of private network dispatch, mobile telephone, paging, text messaging, mobile data (including portable computer and portable fax support) and enhanced services such as voice mail and call forwarding -- all available on a single handset, from a single network with combined billing and customer support.28/ Nextel's service incorporates advanced digital technology and a multiple base station frequency reuse architecture to achieve unprecedented spectrum efficiency -- more than 15 times the capacity of Nextel's existing analog SMR facilities.

In authorizing Nextel's (Fleet Call's) wide-area SMR concept, the Commission stated that the Communications Act directs it to "[s]tudy new uses for radio, provide for experimental uses of

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27/ Nextel is today the leading operator of traditional analog SMR systems. Upon closing certain pending acquisitions, Nextel will provide fleet dispatch communications to approximately 750,000 customers throughout the United States.

28/ Nextel's wide-area SMR systems are in commercial operation in the Los Angeles and San Francisco metropolitan areas and California's Central Valley. Nextel employs 640 persons in California of whom 581 were hired to plan, construct, administer and operate the wide-area SMR system. Nextel will initiate commercial wide-area SMR service in Chicago and New York during the first half of 1995.

frequencies, and generally encourage the larger and more efficient use of radio in the public interest."29/ It concluded that,

> "Fleet Call's proposal falls squarely within the spirit of our statutory mandate. We therefore seek to encourage the development of Fleet Call's networks within existing rules and policy where possible and with rule waiver where necessary and appropriate. . . The public interest, convenience and necessity favor this regulatory approach and we adopt it here."30/

In making this unanimous decision, the Commission recognized that the Communications Act requires it to promote the introduction of more spectrally efficient technologies where there is insufficient spectrum to meet the public's demand for wireless communications services. As then-Commissioner Ervin S. Duggan expressly recognized, the Commission has a

> "sworn duty to support those values that are bedrock for the FCC: to support technological innovation, to support efficient use of the spectrum, to support improved service by licensees, and to support heightened competition."31/

That is what the Commission did in the Fleet Call Waiver Order and in subsequent decisions authorizing wide-area SMR systems throughout much of the Nation and on 530 channels. This FNPRM is

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29/ Fleet Call Waiver Order at para. 11, citing Section 303(g) of the Communications Act.

30/ Id.

31/ Remarks of Commissioner Ervin S. Duggan at the February 13, 1991 Commission Open Meeting. Commission Duggan further commented that although the Commission may be faced with difficult challenges in upholding these bedrock values, as it was in the Fleet Call Waiver Proceeding, the Commission cannot overlook its duty to carry out these responsibilities.